

BEST AVAILABLE COPY**In the Claims:**

1. (Currently Amended) Heating system for a vehicle, comprising:
- a heating air fan (24) for producing a heating air flow to be introduced into a vehicle interior (14),
 - a heating device (22) with a heat exchanger arrangement (26) for heating the heating air flow delivered by the heating air fan (24),
 - a vehicle interior temperature sensor arrangement (50) for producing an output in dependence on the temperature in the vehicle interior (14),
 - a vehicle interior reference temperature predetermining arrangement (56),
 - a heating air flow temperature sensor arrangement (44) for producing a second output in connection with the outlet temperature of the heating air flow heated by the heating device (22),
 - a control device (42, 46) which is arranged to set the delivery capacity of the heating air fan (24) in dependence on the first output and on the vehicle interior reference temperature predetermined by the vehicle interior reference temperature arrangement (56), and to set the heating capacity of the heating device (22) in dependence on the second output,
- wherein the delivery capacity of the heating air fan (24), or a quantity representing the delivery capacity of the heating air fan, does not form an input quantity, on which the control of the heating device (22) is to be based, for the control device (42, 46).
2. (Previously Presented) Heating system according to claim 1, wherein a heating air flow reference outlet temperature is predetermined, and wherein the control

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device (42, 46) controls the heating device (22) in dependence on the second output and the heating air reference outlet temperature.

3. (Previously Presented) Heating system according to claim 2, wherein the heating air flow reference outlet temperature is fixedly predetermined in the region of 60°C - 90°C.

4. Cancelled.

5. (Previously Presented) Heating system according to claim 1, wherein the control device (42, 46) comprises a first control device (46) for the control of the heating air fan (24) and a second control device (42) for control of the heating device (22), the first control device (46) having the first output and the vehicle interior reference temperature as input quantities, and the second control device (42) has the second output and the heating air reference outlet temperature as input quantities.